

Deployment Quarterly

Summer 2003 Vol. 3 Issue 1

Patient Support
Pallets Enhance
AE Missions

- Page 8

Combat Stress
Symptoms May Vary
Among Vets

- Page 10

American Legion
Lends A Helping
Hand To Families

- Page 13

Teleradiology Fills
The Gap Left By
Radiologists

- Page 15

U.S. DEPARTMENT OF DEFENSE
Deployment Health
Support Directorate



DIRECTOR'S message

Dear Readers:

As Operations Enduring Freedom and Iraqi Freedom continue, many of our servicemembers are returning from deployments. Reunion is a time of great excitement and anticipation.

We know from past deployment experiences that many servicemembers will experience minor, and usually temporary health changes following their redeployment. Many can be attributed to the realities of the mission, deployment travel, jet lag, adapting to a different schedule and a change in diet. The military departments offer an extensive array of support services and assistance programs for reuniting servicemembers and families. These can be accessed through the military health care system, from unit chaplains, and from family readiness program resources.

Servicemembers tell me that the best part of any deployment is returning home. For everyone involved, there is much anticipation for a joyful reunion with loved ones. These reunions can also be stressful. In their absence, roles have necessarily changed, children have grown, and routines may have been adjusted. Transitioning to "life as we knew it" will be stressful and will take some time to work through those differences in expectations. Mental health experts agree that this is normal and is quite expected. They describe five steps in the emotional post-deployment process: the honeymoon period, loss of independence, a need for "own" space, renegotiating "routines, and reintegration into the family or community. These steps may take three to six months depending on the family and situation.

Personal communication plays a very important role. Sometimes going slow, lowering expectations and taking the time to get to know each other again are critical to the task of reintegrating the servicemember back into the family or community. Individual or family counseling has been proven to be helpful. Unfortunately, many resist taking advantage of these services. We know from experience that those who do often are relieved to have help in working through their issues. Although this can be a difficult timeframe, it gives individuals and families a chance to evaluate personal changes and to work together.

Recognizing the need for assistance to make it through this period of transition isn't always easy. Experts caution that signs of sleeplessness, increased use of alcohol or overspending are warning signs that something might be wrong. That is why there are programs available for servicemembers and their families. For those returning from deployment, now is the time for rest, recuperation and reconnection with family and community.

We remain fully aware of the robust deployment cycle. As servicemembers return, others continue to travel far from home and serve in harm's way. America is acutely aware of the sacrifice servicemembers and their families are making while supporting Operations Enduring Freedom and Iraqi Freedom. As your deployments end, and you return to your families, please know we appreciate your service on our behalf; we thank you for a job well done.

If you or your family members need information related to a deployment or has questions, don't hesitate to contact a member of my staff by calling our toll-free number (800) 497-6261. Our contact managers — all veterans — are available Monday through Friday from 9 a.m. to 9 p.m., Eastern Daylight Savings Time. We are committed to serving you.

Sincerely,
Ellen P. Embrey
Director, Deployment Health
Support Directorate



Deployment Quarterly

The Deployment Health Support Directorate

Volume 3

Issue 1

**Director, Deployment Health
Support Directorate**
Ellen Embrey

**Deputy Director, Deployment Health
Support Directorate**
Michael E. Kilpatrick, M.D.

**Program Director, Public Affairs
and Outreach**
Barbara A. Goodno

Public Affairs Team Leader
Robert Dunlap

Editor
Lisa A. Gates

Staff Writers
Austin Camacho
Joan Kennedy
Melissa Bursle
Judi Gold

Deployment Quarterly is published quarterly by the Deployment Health Support Directorate Public Affairs Office, 5113 Leesburg Pike, Suite 901, Falls Church, Virginia 22041. Send address changes to the same address.

SUBMISSIONS: Print and visual submissions of general interest to active duty, Reserve Component members, veterans and families are invited. Please send articles with name, phone number, e-mail and complete mailing address and comments to:

Deployment Quarterly
5113 Leesburg Pike, Suite 901
Falls Church, Virginia 22041

Phone: (800) 497-6261
Fax: (703) 824-4229
E-mail: special.assistant@deploymenthealth.osd.mil

The editor reserves the right to edit all manuscripts for readability and good taste.

LETTERS: Letters to the editor must be signed and include the writer's full name, city and state (or city and country) and mailing address. Letters should be brief and are subject to editing.

AUTHORIZATION: Deployment Quarterly is an authorized publication for past and present members of the Department of Defense. Contents of Deployment Quarterly are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Deployment Health Support Directorate.

summer 2003

Soldiers from Charlie Company, 3rd Forward Support Battalion Fort Stewart, Ga., remove three wounded Iraqi civilians from an ambulance.

U.S. Army photo by Sgt. Keith D. McGrew



Features

Commentary. Rear Adm. Stephen A. Turcotte, USN, urges returning servicemembers to play it safe while on leave.

6

Medical Care. Active duty and Reserve combat medics care for wounded Iraqis and servicemembers alike.

7

Open for Business. Tennessee Guard members open medical staging facility at Baghdad International Airport.

8

AE Revolution. Patient support pallets revolutionize Air Mobility Command's air evacuation mission.

8

Now Available. The Department of Veterans Affairs' comprehensive benefits guide is now on the World Wide Web.

9

Research Complete. Four research studies about Gulf War illnesses have been completed.

Stressed Out. DoD mental health experts say combat stress symptoms may vary among returning servicemembers.

Tracking Patients. Fleet Hospital Three personnel test new medical tracking system for local injured sailors and Marines in Iraq.

Family Support. The American Legion's Family Support Network lends a helping hand to military families during deployments.

War Talk. Female F-15E weapons system officer speaks out about her experience flying missions over Iraq.

Technology Advances. Teleradiology may prove to be the answer to shortfall of military radiologists.

Medical Workstation. The Joint Medical Workstation allows commanders to monitor the physical health of their troops in the field.

No Bones. It is estimated that 44 million Americans are at risk for developing osteoporosis, which can be prevented.

In Every Issue

News from Around the World 3
*DoD Complies With New HIPPA Privacy Standards.
Post-Deployment Health Assessments Are Enhanced.
Officials Improve Speed Of Mail To Iraq.*

Ask Our Doctors 5
*U.S. Army Surgeon General Investigates Possible
Cases Of Pneumonia Among Troops In Iraq.*

Vaccines, Drugs & Herbs 5
Watery, Itchy Eyes May Be Signs Of Allergies.

Gulf War Update 9
DoD Releases Final Pesticide Environmental Report.

Health Beat 17
Put Your Foot Down In The Right Shoe.

Resource Guide 20

On the Cover

1st Lt. Julie Ayres, left, and Capt. Mary Melfi and Capt. Tally Parham walk down the flightline at a forward-deployed air base in the Middle East on May 3. The three officers are assigned to the 379th Air Expeditionary Wing and flew combat missions during Operation Iraqi Freedom.

U.S. Air Force photo by Staff Sgt. Derrick C. Goode



Returning Safely From Operation Iraqi Freedom

By Rear Adm Stephen A. Turcotte
Commander, Naval Safety Center

The Navy/Marine Corps team has performed flawlessly in supporting the global war on terrorism overseas. Although much work remains to be done in Iraq, sailors and Marines will soon begin returning home. Having overcome the hazards of combat, they will now face additional challenges. We must maintain our unprecedented level of readiness and sustain this posture over the long term.

As always, staying ready means staying safe. It took considerable effort to deploy our agile, flexible and responsive fleet for such an extended period. We must apply the same amount of effort to get them back both safe and prepared. Well-deserved celebrations and joyous reunions await, but so do the temptations and risks that frequently claim too many of our people. Specifically, we must place renewed emphasis on the following issues.

Drinking And Driving

The message here is simple. If you are going to drink, don't drive. Either stay put, have a designated driver, or call a cab. Make a plan before going out on the town and ensure you and your shipmates stick to the plan. Drinking too much can be deadly, whether you are behind the wheel of a vehicle, walking across a busy street, or stumbling around on a motel balcony.

Fatigue

Everyone wants to hurry home to see his or her family. With a little foresight, you can reach your happy reunion without any accidents on the way. Be conservative in how far you plan to drive each day. Drive during the daytime and have a driving partner. Take plenty of breaks. Rest or sleep when your body or buddy tells you to. Plan to leave early enough to allow ample travel time both to and from your destination.

Staying Safe On Liberty

Use the buddy system, and keep an eye out for one another. Speak up and take charge if situations develop that require intervention. If you are currently in a leadership role, set the example and make it clear that you expect everyone to return from liberty healthy and ready to continue making their invaluable contributions to the



mission.

Learn From history

Traffic death and recreational fatality rates plummeted during Operation Desert Storm, then increased dramatically during the seven months following the war. The traffic-death rate during Operation Iraqi Freedom has fallen to zero and is currently the second longest personal motor vehicle-fatality-free period on record.

Don't let history repeat itself. Bear in mind that traffic-mishap rates are typically higher in the summer months, when most of our sailors and Marines will be returning.

We can prevent needless fatalities with good risk management, responsible decisions and common sense. Now is the time to use all our programs to ensure our returning sailors and Marines are well prepared to resume their roles in the family and the workplace. Stay focused, stay alert, and stay alive.

Your loved ones, your Navy and Marine Corps and your nation need you as we reset our forces and remain ready to accomplish our mission.

Lean forward, be safe, have fun. ■

Rear Adm. Stephen A. Turcotte, USN, is the 48th Commander of the Naval Safety Center located in Norfolk, Va.

Editor's Note: This message was sent to all Navy and Marine Corps shore and afloat activities in April. While the message was directed primarily at sailors and Marines, the information it provides is worth repeating for all. The Naval Safety Center offers a variety of safety tips and other informational materials on its Web site at <http://www.safetycenter.navy.mil/default.htm>

News from Around the World



DoD Complies with New HIPAA Privacy Standards

ASHINGTON — Assistant Secretary of Defense for Health Affairs William Winkenwerder Jr. announced that all military medical facilities have implemented the privacy rule of the Health Insurance Portability and Accountability Act (HIPAA) of 1996. With a directed start date of April 14, 2003, the new rule creates standard safeguards to protect the privacy and confidentiality of personal health care information.

Winkenwerder points out that, "The Military Health System has always had privacy standards in place to limit unauthorized access and disclosure of personal health information; this new rule heightens awareness, raises the level of oversight and provides a standard set of guidelines to protect the privacy of all patients."

As required by the new rule, DoD has mailed approximately five million military health system notices of privacy practices. The notices have gone to every beneficiary enrolled in the Defense Enrollment Eligibility Reporting System (DEERS).

The new privacy legislation requires that health information be disclosed only for treatment, payment, and some health care operations such as scheduling appointments and billing patients. Health information will not be shared with outside sources for marketing, research or any other purpose without the beneficiary's written consent.

Each military treatment facility has an assigned, trained privacy officer available to respond to any questions or concerns that beneficiaries may have regarding the new privacy rules. The privacy officers also serve as patient

— Continued on Page 4

Need A Lift?



U.S. Air Force photo by Tech. Sgt. Dave Buttner

Tech. Sgt. Jeff McElhoe (left) guides the crane operator to place an A-10 Thunderbolt II fuselage in position so the shipping cradle can be moved underneath. The aircraft received severe battle damage during a combat mission over Iraq in April and will be shipped back to the United States for repair.

advocates, ensuring that personal health information maintained by the military treatment facility remains protected yet accessible to beneficiaries and their providers.

A copy of the Military Health System Notice of Privacy Practices is available on the TRICARE Web site for sponsors and family members to download; copies are also available for distribution at each Defense Department military treatment facility. Additional information on HIPAA, Tricare and the new privacy standards is available on the TRICARE Web site at <http://www.tricare.osd.mil/hipaa>.

Post-Deployment Health Assessments Enhanced

WASHINGTON – Thousands of active duty and Reserve U.S. servicemembers deployed overseas for Operation Iraqi Freedom will undergo an enhanced post-deployment health assessment process.

The new health evaluation process was approved mid-April and is being implemented now to provide added safeguards for the health of deployed servicemembers, said Dr. William Winkenwerder, assistant secretary of defense for health affairs.

The process has been enhanced in several ways, Winkenwerder pointed out, and it applies to all military who have served or are serving in the Iraqi Freedom theater.

First, he said, a new post-deployment health assessment form asks more

questions about a service-member's physical and mental health than earlier versions and adds queries about possible health-threatening occupational or environmental exposures during deployment.

Secondly, Winkenwerder continued, each servicemember is required to undergo a post-deployment health assessment face-to-face with a military health care provider upon redeployment to a demobilization site or home station.

Thirdly, all servicemembers will provide a blood sample no later than 30 days after arrival at a demobilization site or home station, Winkenwerder said. The blood serum samples, he noted, will be stored in the serum repository. They may be used in the future to assist in medical care of an individual who later becomes ill, or to determine the extent of some deployment-related exposure that is recognized at a later date. The samples could also be used in the future if medical science develops diagnostic capability for exposures that may have occurred during a deployment.

He noted that results of all post-deployment medical health assessments would be placed within servicemembers' permanent medical records.

DoD, he asserted, has a responsibility "to do right" for America's servicemembers.

"They expose themselves to great risk and harm — they perform

bravely and admirably," Winkenwerder pointed out.

"We owe it to them to ensure that they have a comprehensive health assessment before they resume their usual sorts of duties," he concluded.

Military Officials Improve Speed of Iraq Mail

WASHINGTON — Even in the era of e-mail, getting a letter from loved ones is important.

The Military Postal Service Agency has received a number of complaints about the speed of mail deliveries to and from Iraq. The officials are aware of the problems and expect changes to ease some stumbling blocks.

The main problem, according to agency officials, was that there was no mail facility in Iraq.

"Now there is one at the Baghdad International Airport, and we expect that will improve service," said an official with the agency.

In the past, mail from servicemembers back to the states went from Baghdad to Kuwait, where it was placed on a commercial flight to John F. Kennedy airport in New York. Mail going to Iraq also had to pass through Kuwait. Opening the facility in Baghdad will speed the process and eliminate the Kuwaiti step.

The military mail official said mail clerks are working around the clock to eliminate the mail backlog.

"We're moving between 30,000 and 40,000 pounds of mail each day," he said. He estimated the backlog at about 300,000 pounds of mail.

Officials are working to address problems within Iraq. They said servicemembers based outside the Baghdad area may find their letters are not getting out as quickly as expected because clerks are filling up trucks with mail before dispatching them. They expect that as the country becomes safer, the mail will speed up.

Military postal officials refute the rumor in Iraq that says the U.S. Postal Service is holding the mail at JFK airport. Mail leaving the region takes 16 hours to get to New York. From there, it takes about three or four days to reach the recipients. ■



News From The Front

OPERATION IRAQI FREEDOM -- Airman Martin Rygula, an air transportation craftsman, takes time to write a letter while deployed to Tallil Air Base, Iraq, supporting Operation Iraqi Freedom.

U.S. Air Force photo by Staff Sgt. Shane A. Cuomo

Q Recently I've heard news reports about hundreds of troops getting pneumonia, and some have even died from it. Do you know if this is really happening, and what are you doing to protect them?

A The term pneumonia is used to describe inflammation of the parts of the lung that allow us to take up oxygen from the air we breathe. Severe cases, pneumonia can prevent absorbing enough oxygen into the blood and cause damage to other organs. Even with treatment, pneumonia sometimes causes in death.

There has been much recent publicity about the occurrence of pneumonia among U.S. servicemembers taking part in Operation Iraqi Freedom. Those with mild pneumonia are better and all but two of the servicemembers who developed severe pneumonia during Operation Iraqi Freedom have recovered due to the care they received. Because almost all of the severe pneumonia occurred among Army personnel, the U.S. Army Surgeon General sent special investigative teams to Germany and to Iraq to see if these cases may be

related to one another. When the investigation is complete, the Army will announce the teams' findings and recommended actions.

The most common cause of pneumonia is infection, usually due to bacteria or viruses, but occasionally due to fungi. Many different types of microorganisms can cause pneumonia, and treatment is best guided by knowledge of the specific cause. Antibiotics can treat infections due to bacteria and fungi. No such treatment is available for most viruses. So far, no single type of infection has been found to explain the severe cases of pneumonia in Operation Iraqi Freedom.

The non-infectious types of pneumonia result from the inflammation provoked by a chemical or irritant that directly damages the lung tissue. Treatment is focused on supporting the patient's ability to get enough oxygen and on preventing complications until the lungs have healed themselves. So far, none of the cases of severe pneumonia in Operation Iraqi Freedom has been



Dr. Francis L. O'Donnell

blamed on toxic chemical exposures.

The Army investigations are intended to determine if there are common infectious or toxic causes for some or all of the severe cases of pneumonia. These cases appear to be unrelated to one another, and no single

approach to treatment and prevention is obvious.

The number of cases of pneumonia among our servicemembers in Iraq is not greater than the number that occur each year among U.S. servicemembers. Nevertheless, the detection of these cases has prompted special efforts to determine if there is a common, preventable cause. If a pattern can be detected in these cases, then it is possible that future cases of pneumonia can be prevented and treatments can be improved.

If anyone has health concerns possibly resulting from a recent deployment or has questions about his or her health should see their health care provider. ■

vaccines DRUGS & HERBS

Q My doctor prescribed an antihistamine for my allergies. I have been taking them for about a month or so and they work ok, but it causes me to get sleepy during the day. I have heard some new non-sedating antihistamines are available at the drug store, without a prescription. Do you recommend this?

A There are several considerations when selecting a course of treatment for what I am assuming is allergic rhinitis, which are cost, side effects, properties, clinical status, medical condition and job function.

Allergic rhinitis refers to your body's response to inhaled antigens. Symptoms may include sneezing, runny nose, nasal congestion, itchy eyes and post-nasal drip. Seasonal allergies are usually caused by pollens and outdoor mold spores. Perennial allergies are usually caused by indoor



Cmdr. Gene DeLara, MSC, USN

allergens such as dust, animal dander and indoor mold spores.

My recommendation, always follow up with your physician.

There are numerous first-generation antihistamines, and often it takes a couple of tries to find the right one for your condition and situation. A combination of strategies is often used along with pharmacological management to provide relief of symptoms. Your doctor may have told you that the most effective way of controlling allergic rhinitis is to avoid the allergens. There are numerous

environmental modifications that can be done around the home to reduce your exposure. These include frequent vacuuming of carpets, use of dehumidifiers, keeping pets

— Continued on Page 12

Medics Support Operation Iraqi Freedom

by jerry harben
editor, *the mercury*

The Army forces that led the invasion of Iraq in April received a full range of medical support from combat support hospitals, forward surgical teams, a Mobile Army Surgical Hospital, combat support hospitals, fixed facilities back in Europe and the United States, and detachments with a wide variety of allied skills. Active and Reserve Components were both well represented.

Forward surgical teams were used to provide surgical care close to the point of injury, before critical patients were evacuated to combat support hospitals.

"The surgeries here are aimed at saving a life, saving a limb and preventing infection," Maj. Matt Vreeland told the *San Jose Mercury News*. "If you can clean out an abdominal wound and prevent infection, you can save a life."

"We may not do the definitive operation," said Maj. Rob Bass, a general surgeon with a forward surgical team. "We stop the casualty from bleeding or dying and we evacuate them — if they are stable enough to do the definitive operation, then we'll definitely do that."



U.S. Army photo by Staff Sgt. Shama Parker

Spc. Linda Carvallo, a medic with Alpha Company, 11th Engineer Battalion, 3rd Infantry Division, examines a local resident with a gunshot wound near the Al Wasity hospital in Baghdad, Iraq, May 28, 2003. Soldiers from Alpha Company, 11th Engineer Battalion, 3rd Infantry Division, were supporting Task Force Neighborhood.

After setting up in central Iraq, the 212th Mobile Army Surgical Hospital saw 300 patients and performed 49 surgeries in two weeks, as reported in *European Stars and Stripes*.

"This is really busy, and it's tiring," said Capt. Dale Vegter, a surgical nurse in the operating room. "But this is what we do."

At the peak, the hospital had 51 patients. Some doctors gave up their sleeping cots to make way for injured soldiers.

The MASH loaded its entire hospital into 37 five-ton trucks and five Humvees (a type of military light truck) and drove for 78 hours, 300 miles into Iraq to support rapidly advancing infantry. They set up the hospital during a roaring sandstorm.

One medic, Pfc. Joseph Dwyer of the 3rd Squadron, 7th Cavalry, became something of a celebrity when a photo of him carrying an injured Iraqi child appeared in newspapers and on Web sites around the world. Dwyer said the boy had a broken leg, and the boy's father brought him to the U.S. soldiers after a firefight.

"The kid was doing all right. I could feel him breathing real hard. He

didn't cry one bit, and you know he was a cute little kid. He was scared, though," Dwyer told *USA Today*.

Other Army Medical Department members labored to detect environmental hazards, ensure safe food and water and myriad other duties.

As active-duty medical personnel deployed, Reservists replaced many of them in U.S. military facilities. Many people at Madigan Army Medical Center, Wash., deployed, but Raymond Gyger, regional vice president of the National Association of Uniformed Services, said service didn't miss a beat during the personnel changes.

"I know some of the doctors have been deployed, but I haven't heard of anything that's detrimental in any way, shape or form. It seems to be working smoothly," Gyger told the *Tacoma News Tribune*.

David R. Nelson, president of Sierra Military Health Services Inc., the TRICARE contractor for the northeastern United States, told the *Baltimore Sun* his company saw a dramatic increase in workload after troop deployments began. He said Sierra's monthly enrollments increased 50 percent as Reserve and National Guard members were called to active duty. Sierra conducted benefit briefings for more than 50,000 people. ■

Tennessee Guard Opens Baghdad Facility

by tech sgt. ruby zarzyczny
437th airlift wing public affairs

The 379th Expeditionary Aeromedical Evacuation Squadron has opened a 10-bed mobile medical staging facility near the military flightline at Baghdad International Airport. Facility workers there conduct joint service, coalition and civilian air evacuation missions.

In the field, after self-aid and buddy care, a patient needing additional medical attention goes into a battalion aid station or an Army combat support hospital. If the injury is serious enough the patient comes to the staging facility.

"The [facility] is a staging area for patients being evacuated out of the theater from Army combat support hospitals and into the aeromedical evacuation system," said Maj. Lynne Medley, 379th EAES commander deployed from the Tennessee Air National Guard's 118th Aeromedical Evacuation Squadron in Nashville.

The facility has four flight nurses, one medical service corps officer, one administration airman, two radio operators and seven aeromedical evacuation technicians working around the clock. They are all Guardsmen from the Nashville squadron, and they deployed to Baghdad International Airport together.

"I love being here," said Master Sgt. Ken Quattlebaum, the 379th EAES noncommissioned officer in charge and first sergeant. "We've been training together for this kind of situation for two years, and when we got the call, they called the whole team and deployed us together. We've had two years to get to know each other, and if you were to throw different people together, they might not have been able to work together as well as we have."

According to Medley, it is critical for the team to work well together because it takes all of them to keep the mission going.

"About 80 percent of the patient movement to the [facility] is mostly at night because of the availability of planes," said Medley. "When [Joint



U.S. Air Force photo by Tech. Sgt. Ruby Zarzyczny

Senior Master Sgt. Ken Quattlebaum (left) and 2nd Lt. Beverly Groogand (right) carry a wounded soldier from a helicopter to an ambulance en route to the mobile aeromedical staging facility. The 379th Expeditionary Aeromedical Evacuation Squadron at Baghdad International Airport comprises members of the Tennessee Air National Guard's 118th Aeromedical Evacuation Squadron in Nashville.

Patient Movement Requirements Center officials at Scott Air Force Base, Ill., decide a patient will move, the [facility workers] communicate by secure radio to coordinate the patient movement. Then we wait to hear the incoming choppers. Some of the patients need medical attendants to stay with them, and we can generate a crew to go with the patient and take care of them in flight."

Within the first two weeks, the airmen moved 74 litter patients, 169 ambulatory patients and 15 attendant patients.

"When the patients get here we check their vital signs, do a physical assessment, check and change bandages, check IV sites, and check to see if they need medications," said Medley.

"Once the patients are stabilized, we provide them with showers, toothpaste and cooled water, something many of the patients coming from the field haven't seen in months," she said. "They can also take a trip into the 'care package' area ... to select items they might need or want."

"We're also supporting the humanitarian side," said Medley. "[People] will bring their patients here to stay where it's cool and readily accessible to the flightline."

The airport has two different areas, the military side and the civilian side, separated by a distance of about seven

miles.

"The Iraqi civilians who are evacuated through the [facility] are put on the planes with the approval of the secretary of defense," said Medley. "An Iraqi civilian working with the Army was injured in an ambush and was evacuated ... recently. Many of the patients are evacuated to hospitals in Kuwait. The military patients are treated in Kuwait or sent on to a hospital in Germany."

The 10-bed facility here averages about 20 patients a day, and workers provide medical care to the residents of tent city while the expeditionary medical support teams are in the process of standing up.

"We work under stressful situations," said Medley. "We have had [everyone] from a critical injury pilot to an injured 4-month-old baby. We know each other well, and that helps us cope with the stress."

"We have the best medical care and patient evacuation system in the world," said Quattlebaum. "Someone who is out there actually fighting can be confident that [he or she] will have the best medical treatment in the world, and we're part of that system."

"The [facility] will be here as long as the contingency operation is here," said Medley. "We're staying until September, but we're prepared to stay as long as we're needed." ■

Patient Support Pallets Revolutionize Air Evacuation Missions

by 2nd Lt. Dustin Hart
air mobility command public affairs

When Pfc. Jessica Lynch came home from the war on a C-17 Globemaster III, she and the 49 other injured servicemembers on the flight were able to take advantage of a new aeromedical evacuation technology.

When that C-17 touched down April 12 at Andrews AFB, Md., it was one of the first times patient support pallets were used to return injured troops from the battlefield.

According to Air Mobility Command officials, the patient support pallets are increasing the capability of AMC's aeromedical evacuation mission.

"The vision of aeromedical evacuation is to have the capability to perform AE [aeromedical evacuation] missions on any Air Force mobility aircraft," said Maj. Lisa DeDecker, the AMC branch chief of aeromedical

evacuation concept and development. "The PSP allows us to take advantage of all our existing airframes."

Now used on KC-135, KC-10 and C-17 airframes, the PSP is built on a standard cargo pallet, and provides supports for six stretchers or a combination of three airline seats and three stretchers. Remaining mobility aircraft do not need to use the PSP because they already have some ability to support evacuation missions.

Although the C-17 is designed to support AE as a secondary mission, and has electrical outlets and oxygen sources for patient care, it is only configured to carry nine stretchers. The PSP allows the C-17 to support larger numbers of patient transfers. With PSPs, the C-17 can carry a maximum of 12 pallets to accommodate up to 72 patients.

"The retirement of the C-141 in 2006 has really brought this technology to the forefront as a critical need," said Maj. Tami Averett-Brauer, AE Allocation Division chief at AMC's Tanker Airlift Control Center. "When we started transitioning to the C-17, we knew that we would have situations that would require us to transport more than nine stretchers."

In addition to increasing patient-carrying capacity, the PSPs also save the Air Force millions of dollars each year.

"Purchasing the PSPs is far less expensive than the cost of modifying the existing fleet of aircraft to support needed AE missions," said Averett-Brauer.

The C-141 has been an AE long-haul workhorse for many years. The C-141 was designed to perform AE missions and has a capacity to carry more than 100 stretchers.

In fall 1999, AMC formed an evaluation team to reevaluate the wartime requirements for aeromedical evacuation. The team's findings showed a need for alternatives to the aging fleet of aircraft performing AE missions, like the C-141.

From these findings, development of the PSP began and, in April 2002, four prototype PSPs were sent to Pacific Air

Forces for weekly operational testing. The first delivery of 25 production model pallets was made in February of this year.

"The pace at which we went from drawing board to a prototype is phenomenal," said DeDecker, who is currently the deputy commander of the 775th Expeditionary Aeromedical Evacuation Squadron. "It has been a valuable tool in the success of the AE mission in Operation Iraqi Freedom. The AE system moved 640 battle casualties and more than 1,300 other patients in the first 35 days of the war without the use of dedicated aircraft. That is a remarkable transformation." ■

New Online VA Benefits Guide Now Available

The Department of Veterans Affairs has made its comprehensive benefits guide available for free on the Internet.

Federal Benefits for Veterans and Dependents, available online at <http://www.va.gov/pubaff/fedben/Fedben.pdf>, is a 118-page handbook describing benefits provided by the VA and an overview of programs and services for veterans provided by other federal agencies.

VA officials estimate most of America's 25 million veterans qualify for at least some VA benefits, but many are unaware of their entitlements. This handbook includes a listing of toll-free numbers, Internet information resources and VA facilities.

The book can be purchased through the Government Printing Office for \$5 for U.S.-based customers and \$6.25 for those overseas by calling toll-free (866) 512-1800. ■



U.S. Air Force photo

Members of the 775th EAES tend to a patient on a patient support pallet. The new patient transport technology can be used for aeromedical evacuation on KC-135, KC-10 and C-17 airframes.

Pesticides Final Environmental Exposure Report Released

by joan kennedy

The Deployment Health Support Directorate released the final version of the Pesticides Environmental Exposure Report April 24 about the use of pesticides and the potential for overexposure to pesticides by servicemembers during the 1990-1991 Gulf War. An interim report was published in January 2001 to update veterans on what had been learned during the course of the investigation.

Analysts from the Deployment Health Support Directorate concluded that some troops may have been potentially overexposed to pesticides and that this may have contributed to some of the unexplained symptoms reported by some Gulf War veterans. However, there is little documentation that quantifies Gulf War pesticide overexposures and veteran interviews suggest that fewer

than 10 veterans sought treatment for pesticide exposure. Since publishing the interim report, the directorate has received no new information that would have changed its conclusion.

Although this is a final report, veterans who have information they believe may change this environmental report are encouraged to call the toll-free Veterans' Direct Hotline number at (800) 497 - 6261 Monday through Friday from 9 a.m. to 9 p.m., Eastern Standard Time. Veterans may also write to us via e-mail at special.assistant@deploymenthealth.osd.mil.

To read the final Pesticides Environmental Exposure Report, go to the GulfLINK Web site at http://www.gulflink.osd.mil/pest_final/index.html. ■



New Gulf War Research Presented To Advisory

WASHINGTON — Research studies that challenge the conventional wisdom regarding potential links between military service during the Gulf War and the numerous, yet often undiagnosed, illnesses reported by many veterans were presented recently to the Department of Veterans Affairs Research Advisory Committee for Gulf War Veterans' Illnesses.

"I am very pleased with the progress of the committee and ongoing research into the illnesses that continue to afflict the brave men and women who served so well during the Gulf conflict," said Secretary of Veterans Affairs Anthony J. Principi. "They haven't given up on their search for answers and neither will we."

Presentations were given on June 16 by the principal investigators of four completed studies that looked at the nervous system, cognitive function, use of pyridostigmine bromide (a drug protecting people from nerve agents) and exposure to pesticides and nerve gas.

Antonio Sastre, Ph.D., of Midwest Research Institute in Kansas City, Mo., presented, for the first time,

results of his Defense Department-sponsored study of autonomic nervous system function in Gulf War-era veterans. The autonomic nervous system controls many of the body's functions (like breathing) automatically, without any conscious effort. Using a battery of tests to capture the complexities of the autonomic nervous system, Sastre's findings indicate that ill veterans demonstrate autonomic system dysfunction on a broad range of tests.

Results of a just-published VA-funded study by Roberta F. White, Ph.D., of Boston University School of Medicine and the Boston VA Healthcare System Medical Center indicated that Gulf War-deployed veterans performed "significantly worse" on tests of attention, visuospatial skills, visual memory and mood. Additionally, deployed Gulf War veterans who used pyridostigmine bromide performed worse than their deployed comrades who did not use the drug.

John Vogel, Ph.D., of Lawrence Livermore Laboratory in California, discussed the use of accelerator mass spectrometry to detect very low levels of pesticides and their effect on the

brain's increased absorption of a second toxic exposure. The research, conducted with animals, was sponsored by the National Institute of Environmental Health Sciences.

Likewise, undetected low-level exposure to sarin nerve gas can cause delayed development of brain alterations that may be associated with memory loss and cognitive dysfunction in animals. This study, by Rogene Henderson, Ph.D., of Lovelace Respiratory Research Institute in Albuquerque, N.M., advances scientific understanding of the long-term effects of exposure to chemical weapons.

"This new research has important implications, not only for ill veterans, but for the development of medical defenses to protect future American troops and civilians from chemical attack," said committee chairman James Binns.

For more information about the VA's Research Advisory Committee, for Gulf War Veterans' Illnesses and its committee members, log on to its Web site at <http://www.va.gov/RAC-GWVI/>. ■



Soldiers assigned to the 1st Infantry Division, 63 Armored Regiment, provide security with support from a M1A1 Abrams Battle Tank and a M2A3 Bradley fighting vehicle in Kirkuk, Iraq.

U.S. Army photo by Private First Class Brandon R. Aird

Combat Stress Symptoms May Vary Among War Vets

by rudi williams
american forces press service

ental health experts don't know what combat stress reactions to expect from servicemembers returning from the war in Iraq. And it's not just stress reactions from actual combat, according to Army Lt.

Col. (Dr.) Elspeth
Cameron Ritchie.

Some could be disturbed or demoralized by stressors from the consequences of combat, such as handling remains of civilians, enemy soldiers or U.S. and allied personnel. Or they could come from dealing with POWs, witnessing homes and villages destroyed by bombing or a number of other battlefield stressors.

"Combat stress reactions, which are psychological reactions to fierce combat or operations other than war,

Soldiers from the 3rd Infantry Division in firing positions during an enemy approach on their position at objective RAMA, in southern Iraq on March 24, 2003.

are both physical and psychological," said Ritchie, program director for Department of Defense's mental health policy and women's issues for the Office of the Assistant Secretary of Defense for Health Affairs. "Physical reactions are things like your hands sweating and trembling and your heart racing, or a need to go to the bathroom a lot."

The psychological reactions include things like anxiety, hypervigilance, difficulty concentrating, or sleeping, irritability and sadness. Ritchie emphasized that combat stress reactions are normal reactions to abnormally stressful or traumatic situations.

However, Ritchie, a psychiatrist, said, "If these reactions go on for long periods of time or get in the way of job



U.S. Army photo by Sgt. Igor Paustovski

"Some people returning from Operation Iraqi Freedom may not want to talk about what happened for a while."

performance, it's important to get treatment."

She said soldiers and Marines can recognize in themselves or their buddies the anxiety and irritability that combat stress reactions can cause.

"When things get in the way of functioning, that's when a little more help is needed," Ritchie noted.

Some people returning from Operation Iraqi Freedom may not want to talk about what happened for a while, she pointed out.

Signs that a returning servicemember is having genuine difficulty, she said, could include temper outbursts, detachment or general difficulty interacting with family members. A loved one who seems to be having a hard time adjusting to life back at home, Ritchie said, should be encouraged to talk to a mental health professional.

The extent of psychological reactions servicemembers might have from Iraq is unknown.

"But I would be there for him or her when he or she is ready to talk."

have difficulty functioning. Some people may be troubled by an occasional nightmare, which isn't classified as

"What we may see is people who are repeatedly seeing the images of battle," Ritchie said.

She pointed out that there's a lot of overlap between combat stress and the stress of everyday activity.

"What differentiates combat stress is usually the intensity of what has happened," the doctor noted. "Sometimes you'll have repeated memories and intrusive thoughts focusing on what happened."

Long-term reactions to combat stress could lead to post-traumatic stress disorder, she noted. "By definition, PTSD [Post-Traumatic Stress Disorder] is supposed to happen a month or more after the event," Ritchie said. "There can be some similarities in the symptoms of combat stress and PTSD — nightmares, insomnia, anxiety, numbness, hypervigilance and intrusive thoughts."

Some servicemembers may have only some symptoms of PTSD and

PTSD.

"But other folks might feel that they're so scared that they can't get to work," she said. "That is a problem, and we want them to seek treatment."

However, she said some of these reactions are common; therefore, she doesn't advocate necessarily seeking treatment immediately.

"If the symptoms keep going on, such as nightmares night after night, they should seek help," Ritchie said.

Some health care providers and family members make the common mistake of encouraging people to talk about everything that happened before the patient is ready to talk, Ritchie noted.

"I wouldn't push the returning soldier or Marine to talk about what happened right away," she said. "But I would be there for him or her when he or she is ready to talk."

There's also concern about servicemembers' reactions to changed family situations. Those returning from the battlefield often



envision everything at home is going to be perfect, like a flawless honeymoon. But often things are a little bit different, Ritchie said.

"The kids may have grown. They may not respect authority in the same way. The spouse may have more independence. He or she may have needed to make some decisions that the soldier or Marine weren't part of. So often there is some friction when the soldier or Marine gets home.

"Families should expect a little bit of friction so it doesn't spook them," she said. "So, they don't think, 'Oh, no! My marriage is coming apart!' It's part of the reintegration process."

Modern day transportation plays a major role in creating the problem, she noted.

"In World War I and World War II and Korea, people came home by ship that took two or three weeks," Ritchie said. "They had a chance to get rested and talk to their unit about what had happened and prepare to reintegrate with the family."

"Nowadays, people have been on the battlefield one day and maybe at home or the shopping mall in a

— Continued on Page 16



FH-3 Tests Patient Tracking System In

by doris ryan
bureau of medicine and surgery

leet Hospital (FH) 3 is testing a unique patient tracking system developed by Navy researchers. The Tactical Medical Coordination System (TacMedCS) is a wireless communication network designed for field use that captures and displays real-time casualty data.

The system, originally designed for Fleet Marine Force (FMF) corpsmen to locate injured Marines during urban combat and document medical care, was reconfigured in record time to allow the fleet hospital to track patients moving through its facility.

The original TacMedCS includes three components: a wearable plastic tag with an embedded electronic chip to store individual medical information; a palm-sized scanner to electronically read and write to the chip, and a central server with a database and a digital map display of the operational areas.

With four years of research and multiple field trials during Marine Corps exercises to its credit, the research team from the Naval Aerospace Medical Research Laboratory, Pensacola, Fla., headed by Chief Hospital Corpsman Michael E. Stiney, already had the chips, scanners

and server needed by FH-3. Instead of tags, the fleet hospital wanted patient wristbands, an easy task for the team and their civilian partners. The real obstacle was rewriting the software to capture the information the fleet hospital required.

"We were asked to modify the TacMedCS system, and we did," said Stiney, a cardiovascular technologist and FMF corpsman. In just one week, the team deployed 800 wristbands, a wireless network complete with relays and antennas, a laptop with the database, five scanners and a server.

The point man for the test is Lt. David Everhart, nursing informatics officer with FH-3. Everhart explained how TacMedCS is being used at the fleet hospital.

The hospital receives patients primarily from forward surgical units and also serves as the "community hospital" for the region of operation. The patient administrative staff assembles charts for each patient, which includes a TacMedCS wristband. The casualty receiving corpsman scans the patient's wristband, injuries and

treatments are documented, and the patient is then moved to one of the three wards, the Operating Room, or the Intensive Care Unit. Movement through the fleet hospital is recorded and tracked by scanning the wristband. When the patient leaves the fleet hospital the final disposition is electronically written to the wristband.

FH-3 is a 500-bed level three facility with modular capability. For Operation Iraqi Freedom, the facility was configured to a 116-bed expeditionary medical facility that included a casualty receiving unit, an operating room, three inpatient wards, and an intensive care unit. Ancillary services included laboratory, radiology and pharmacy suites.

"From a beta test standpoint, I feel that this has been very successful. Although we experienced some software problems initially, we have the system in place and working as anticipated. As a real-time patient-tracking device, TacMedCS has proven it's worth. The technology has enormous potential in my opinion. As these data travel with

— Continued on Page 18

"As a real-time patient-tracking device, TacMedCS has proven it's worth."

Vaccines

— Continued from Page 5
and plants out of bedrooms and an entire list of things to do and not do. Numerous self-help Web sites are available with these tips.

In addition to environmental modifications, there are numerous pharmacological agents to select from; administered via oral tablets/capsules, nasal sprays and eye drops. The newer non-sedating oral antihistamines are no more effective in reducing symptoms of allergies than the older antihistamines; however, they may be preferential because of a better side effect profile — specifically, less drowsiness, and fewer anticholinergic effects such as dry mouth, urine retention, constipation and blurred vision. Many military jobs are inherently

risky and require a person to be fully alert, awake and aware. This unquestionably is the best argument for these medications. You didn't indicate your specific job, however, if you were in a flying status, there are very few medications you could take and still fly. If this is the case, discuss the various options with your flight surgeon or aviation medical officer.

I would also recommend checking with the military pharmacy (if available) at your location before purchasing from your local drug store. Some military pharmacies have non-sedating antihistamines on their formulary. Also, I will take this opportunity to mention the fairly new TRICARE Mail Order Pharmacy program. While non-prescription, over-the-counter medications are not available through the TMOP, it is an excellent means of obtaining your

non-emergent, routine medications stateside and overseas. You can get up to a 90-day supply for minimal co-pay. You can find more information on Tricare Mail Order Pharmacy program at <http://www.tricare.osd.mil/pharmacy/tmop.cfm>. ■

Cmdr. Gene DeLara, Medical Service Corps, U.S. Navy, serves as the medical planner in the Deployment Health Support Directorate. He has a Doctorate of Pharmacy and a Masters of Business Administration. DeLara is both a pharmacist and medical planner, holding the 1805 Plans, Operations, and Medical Intelligence specialty code.

American Legion Reaches Out To Families During Deployments

by lisa a. gates

Increased reliance on members of the National Guard and Reserves to support many of the recent operations and exercises overseas has, in some cases, caused a burden on family members left at home. For military family members needing an extra hand to help with everyday household chores — mowing the lawn, doing car and home repairs, cooking and caring for children — assistance may be as close as their nearest American Legion Post.

"The American Legion created the Family Support Network to help those families who are juggling finances, need the family car fixed or other home repairs or who needs someone to help with the grocery shopping," said Jason Kees, program coordinator for the American Legion's Family Support Network.

"The men and women [serving in the military] are making a great sacrifice for our country and so are their families. The American Legion stands committed in our efforts to ensure that these families don't have

to shoulder this burden alone.

"The Family Support Network was not created to replace existing Department of Defense support programs, but rather to augment them and ensure that no family falls through the cracks. With 15,000 [American Legion] Posts, we have a lot of resources available at the local level ready to help our military family members in need."

In 1990, the unprecedented mobilization of thousands of National Guard and Reserve units to support Operations Desert Shield and Desert Storm caught many of these military families unaware and unprepared to deal with shrinking income and juggling everyday responsibilities. Sometimes paychecks were lost or not forwarded to the family; this was especially true for National Guard and Reserve families. To meet the needs of



these military families, the American Legion created the Family Support Network. Over the past 12 years, the Family Support Network has been providing assistance to thousands of families of deployed servicemembers. This year alone, the Family Support Network has responded to more than 1,000 calls for assistance and information from military family members.

"The calls we receive range from simple requests for information to mowing the lawn to transportation assistance," said Kees. "It's just another way that we can support the troops and to show that we care."

How the program works: Servicemembers and their families who need assistance can call the Family Support Network's 24-hour national toll-free hotline at (800) 504 - 4098. Information such as the name, address and telephone number of the caller and the reason for the call is collected. The call is then referred to the American Legion department or state in which the call originated. The departments relay the collected information to a local American Legion Post. The local Post contacts the family to see how they can provide any available assistance or refers the family to the appropriate agency. Additionally, families can submit an electronic

— Continued on Page 14





U.S. Air Force photo by Master Sgt. Terry L. Blevins

First Lt. Julie Ayers, a 336th Expeditionary Fighter Squadron weapons system officer, arrived in Southwest Asia with less than two years in the back seat of the F-15E Strike Eagle.

Female F-15E WSO Talks Combat

by capt. don kerr
379th air expeditionary wing public affairs

aybe more than any other aircraft in the coalition inventory, the F-15E Strike Eagle used new tactics in combat to neutralize enemy forces and provide ground troops with air support.

Strike Eagle aircrew often took off on missions not knowing their specific targets or their coordinates. But they did know their mission: to take out key enemy military infrastructure and also provide critical close-air support against enemy troop concentrations on the ground.

First Lt. Julie Ayers, a 336th Expeditionary Fighter Squadron weapons system officer, deployed to an air base in Southwest Asia supporting combat operations.

Arriving as an aviator with less than two years in the back seat of the F-15E, Ayers now has as much or more combat experience than 50 percent of Strike Eagle navigators. However, being a junior officer and being a woman has not overwhelmed Ayers.

"When I think about my personal contribution, it's really a drop in the bucket," she said. "Compared to the overall number of sorties flown every hour of every day of every week, my contribution was small. Being so young, I'm just glad I got the opportunity to be a part of this."

While she takes pride in being a role model for women, that has no bearing on her responsibilities or performance when flying.

"I don't ever think about it when I'm flying," said Ayers. "[Women] get treated exactly the same in the jet. There are certain tasks for the pilot to do and certain tasks for the WSO to do, and they are not gender-specific. When the pilot needs you, he doesn't have time to think about whether or not you're a woman." ■

Legion

— Continued from Page 13
request to the Legion's Web site at <http://www.legion.org> or send an e-mail message to familysupport@legion.org to request assistance. E-mail messages should include the name, address and a telephone number where the family member can be reached and the type of assistance needed.

"Some of our posts are large while others are small, but [each] can offer help in some form or another," said Kees. "Sometimes it's just knowing where to call. Posts that don't have the resources often act as a starting point for families to get the assistance they need."

The response to the Family Support Network has been overwhelming, said Kees. Since Sept. 11, 2001, there has been a tremendous outpouring of people wanting to know how and what they can do to support the troops.

"It seems few truly understand how precious this type of support is to our men and women in uniform," said Ronald F. Conley, the American Legion National Commander.

Another program, said Kees, which goes hand-in-hand with the Family Support Network, is the Temporary Financial Assistance.

"For families of eligible veterans with minor children, the American Legion can help meet the basic needs of shelter and food," said Kees.

The Family Support Network and Temporary Financial Assistance programs are just two examples of support the American Legion offers families of military personnel. The American Legion established the September 11 Memorial Scholarship program to ensure children of active duty personnel killed in the Sept. 11, 2001, terrorist attacks or while serving in support of Operations Enduring Freedom and Iraqi Freedom have the opportunity for higher education.

To learn more about the Family Support Network, the Temporary Financial Assistance program, the September 11 Memorial Scholarship and other programs, go to the American Legion's Web site, <http://www.legion.org>.

In response to the overwhelming

requests from the public about how to support the troops, the American Legion launched a new section on their Web site to answer that question. The new section called "Support Our Troops" offers several suggestions of ways to reach out to U.S. servicemembers and their families.

The American Legion was chartered by Congress in 1919 as a patriotic, mutual-help, war-time veterans organization. It has nearly three million members in some 15,000 American posts worldwide. These posts are organized into 55 Departments — one each for the 50 states, the District of Columbia, Puerto Rico, France, Mexico and the Philippines. ■

Support for our troops

When You Go Into Action ...

So Do We! The American Legion has reactivated the **Family Support Network** and its toll-free hotline to help all the support personnel and troops involved in Operation Enduring Freedom, the U.S. war on terrorism called by President Bush following terrorist attacks on September 11, 2001. Family members and GIs can call this number 24 hours a day with questions, problems, or requests for assistance.

"We shall not fail those we serve."

**For Assistance,
Call Our 24-Hour Hotline
1-800-504-4098**



Teleradiology Answer To Shortfall In Military Radiologists

by karen fleming-michael
standard staff writer, fort detrick, md.

Radiologists' being able to access medical images without being in a hospital is commonplace in civilian medicine, and now the military has made teleradiology systems standard for even the most remote locations.

First used by the Army in early 1991 during the Gulf War, teleradiology subsequently deployed to Somalia, Haiti, Bosnia, Kosovo, Hungary, Navy ships and, most recently, Afghanistan and Kuwait.

"The technology today is so advanced that a clinic sending exams electronically thousands of miles away provides the same image quality as the images coming from their own in-house radiology department," said Tom Lewis, who addresses teleradiology issues for the Air Force Medical Logistics Office.

In large part, the exodus of

radiologists from the military has fueled the need for teleradiology systems. Over the next few years the Army expects to lose approximately 30 percent of its radiologists; the Air Force, 50 percent; the Navy, 20 percent.

"In four years [from 2002 to 2005], the Army is projected to lose 33 [of its 113 radiologists] with no guarantee of replacements in sight," said Bob De Treville, the program manager for Army teleradiology initiatives at Fort Detrick. (The outlook may not be quite so bleak for the Army. Col. James Breitwieser, the radiology consultant, said the projected losses don't take into account the continued graduation of radiology residents.)

"Radiologists are in high demand everywhere," said Chris Riha, a clinical engineering consultant for the Army's



teleradiology program at Fort Detrick. "Their counterparts in civilian sectors are among the highest income group of practicing physicians." For example, recent postings on Radiology Jobs Online feature positions that offer radiologists — Continued on Page 19

New DoD Computer System Allows Commanders To Monitor Health of Troops In The Field

by melissa burslie

The Department of Defense has a new online tool that serves as both a medical command and control center and medical surveillance system. The Joint Medical Workstation is one of the latest technological advances employed during Operation Iraqi Freedom. It allows commanders and medical planners to monitor the physical well being of their servicemembers and medical treatment facilities capabilities. The information collected can also be used to look for health trends and data analysis.

Theater commanders, joint task force commanders and medical planners

identified a need for one system that could compute and analyze information from the military services' medical surveillance tools already in place. Several organizations, in conjunction with the Deployment Health Support Directorate, worked together and created the Joint Medical Workstation, also known as JMeWS, to meet that need. The Web-based workstation has been functional since January 2003 and is currently being used by the United States Central Command.

"With this Joint Medical Workstation, we are now able to provide a real-time medical snapshot of what is going on in a specific theater of opera-

tion down to the unit or joint task force level," said Anthony DeNicola, Deployment Health Support Directorate's program manager, Information, Technology and Security. "This information can then be used to locate, coordinate and provide the best care available to the servicemembers on the ground in a deployment situation."

This joint compilation of data allows users to view information such as medical treatment facility location, equipment, supplies, blood and personnel. Capability reports generated from the data allow leaders to make better informed decisions about medical issues.

— Continued on Page 16

Stress

— Continued from Page 11

day or two. That reintegration is just a little bit too fast. In some cases, it could be jarring.” ■

Editor's Note: If you feel the need to talk to someone about your deployment experiences or need information on where to seek physical and mental care, there are several resources available.

Many family support centers on installations as well as chaplains and other clergy members in your local communities provide one-on-one counseling and group sessions with licensed, professional counselors. Mental health services that are available through your TRICARE medical benefits are also a resource to call if you need them. Log on to the TRICARE Web site at <http://www.tricare.osd.mil>.

The Deployment Health Clinical Center at Walter Reed Army Medical Center joins with veterans, their families and their providers in an effort to find answers, improve health care and enhance quality of life after military deployments. You can reach them by calling toll-free (866) 559 – 1627 or on the Web at <http://www.pdhealth.mil>

Another resource is the Direct Hotline for Servicemembers, Families and Veterans where contact managers are able to assist in answering deployment-related questions. You can call the toll-free hotline number (800) 497 – 6261 Monday through Friday from 9 a.m. to 9 p.m. Eastern Standard

Time. ■

Homecoming Tips

- Go slowly — don't try to make up for lost time
- Accept that things may be different
- Talk with each other about your experiences
- Take time to become reacquainted
- Accept that your partner may be different
- Remember that intimate relationships may be awkward at first
- Tone down your fantasies — reality may be quite different
- Communicate openly with your partner and family
- Reassure your children — change often frightens them
- Plan on family activities, but be flexible
- Set aside quality time with each of your children
- Plan for visits from your extended family
- Curb your desire to take control

Workstation

— Continued from Page 14

The workstation is designed with the ability to be customized by the user and has a variety of ways to show information quickly and easily. Some of these include geographical maps and color-coded charts and tables. For example, with one click on a map, a user can find out where the nearest orthopedic surgeon is located in theater or how many units of blood are in the closest medical treatment facility.

“All of the information collected is stored in a classified environment and is available through the classified Internet,” said DeNicola. “Once the patient information is extracted and declassified, it will be shared with

the Department of Defense electronic medical records programs for archival and further analysis as needed.”

The second function of the Joint Medical Workstation is medical surveillance. Each treatment facility using this system submits a daily record of its patient encounters. These records are collected and give JMeWS the ability to show real-time patient status. If a treatment facility can't submit the entire patient record, it submits a disease and non-battle injury report to indicate the number of patient visits to that particular facility. Data analysis tools then use the data derived from the patient records and disease and non-battle injury reports to determine trends and alert for spikes in specific areas. If the surveillance tool alerts for a spike, the command surgeon can investigate further by looking into individual patient records for particular symptoms.

A real-time example of the ability to look at spikes occurred during the

sandstorms in Iraq where troops were supporting Operation Iraqi Freedom. At the height of the sandstorms, JMeWS users could see the expected increase of respiratory complaints. As the sandstorms receded, so did the numbers of respiratory complaints from the personnel in theater. If those complaints had not decreased, further appropriate medical measures could have been taken. If time-specific medical information is needed for future analysis, it is electronically stored and available for researchers.

“The Department of Defense and Deployment Health Support Directorate continue to find ways to protect the health of the servicemembers and their families,” said DeNicola. “The Joint Medical Workstation ensures medical providers and military planners have the real-time information they need in any situation.”

Soon the Department of Defense will expand the JMeWS program to include additional major commands. Collecting and providing accurate medical information both in theater and after a deployment are part of the total Force Health Protection program. ■

Severe sand and wind storm hit this forward deployed location in Southwest Asia. Conditions make it almost impossible to work outside. Sandstorms often make work difficult for airmen in the region. Despite the challenge, aircraft from the base still flew combat sorties in support of Operation Iraqi Freedom.



U.S. Air Force photo by Master Sgt. Terry L. Blevins

Make No Bones About

by aveline v. allen
bureau of medicine and surgery public affairs

Are the bones in your body strong and healthy? If not, it could be a sign of osteoporosis.

Osteoporosis is defined as a disease in which bones become fragile and are more likely to break, according to the National Osteoporosis Foundation. Although there is no cure for osteoporosis, this debilitating disease is preventable, and treatable if you already have it.

Medical statistics show that an estimated 44 million Americans are at risk for this disease. Approximately 10 million persons currently suffer with osteoporosis, and it is projected that 34 million individuals have low bone mass, making them highly susceptible to developing the disease. It also accounts for more than 1.5 million fractures annually, most commonly in the hip, wrist, spine and ribs.

Many people think of this disease as an older person's disease; however, it can develop at any age, and in people

of all ethnic backgrounds. At least 80 percent of women are affected by it, in comparison to 20 percent of men.

Although these numbers may be shocking, there are certain risk factors associated with this disease. The National Osteoporosis Foundation reports some of these include current low bone mass, a family history of osteoporosis, low lifetime calcium intake, cigarette smoking, excessive use of alcohol and an inactive lifestyle.

"People who are at highest risk for osteoporosis are women who weigh less than 126 pounds, those persons who have a family history of osteoporosis or a fragility fracture, those who are current smokers, and people who have had a prior fracture," said Cmdr. Amir Harari, head of the endocrinology division at Naval Medical Center San Diego.

Also referred to as the silent disease, osteoporosis has no symptoms associated with it, mainly because bone loss happens without any observable symptoms, according to the National Osteoporosis Foundation. Medical sources show

many persons don't know they have it until their bones become so weak that any sudden movement, such as a strain, bump or fall, causes them to have a fracture.

"In women, the lifetime risk of an osteoporotic fracture is 40 percent," said Harari. "This is greater than the risk of breast, endometrial and ovarian cancer combined."

However, people can prevent this disease by taking certain steps. One preventable measure is to have a bone density test, which according to the National Osteoporosis Foundation, can do three things: detect a potential fracture before it occurs, predict your chances of getting fractures in the future, and determine your rate of bone loss.

Other preventable measures include creating and maintaining a diet rich in calcium and vitamin D, doing weight-bearing exercises, not smoking, lessening your alcohol consumption, and if prescribed, taking necessary medication to treat the disease.

Medical experts suggest, depending

— Continued on Page 18

Put Your Foot Down In The Right

by OS2 wendy kahn
national naval medical center

According to statistics, about 75 percent of Americans will experience foot problems at some point during their life.

Problems such as bunions, neuroma [pinched nerve] and improper foot hygiene cause foot pain, which can limit freedom and mobility in walking or any sports activity.

The discipline of podiatry involves the medical and surgical treatment of all foot and ankle disorders. At the National Naval Medical Center in Bethesda, Md., the podiatry clinic offers a full scope of treatment from conservative care to invasive care.

"Conservative care is given for mild strains and sprains without the



U.S. Air Force photo by Airman 1st Class Dallas Edwards
INCIRLIK AIR BASE, Turkey -- Lt. Col. Rod Matte, executive officer to the Operation Northern Watch commanding general, completes his goal of running 1,000 miles while deployed.

need for surgical intervention," says Lt. Cmdr. Alberto Rullan, service chief of podiatry and specialty leader

of podiatry for the Navy's Bureau of Medicine and Surgery. "Treatment for a serious injury usually involves immobilization in a cast or splint until the servicemember can return to full duty or as close to full duty."

With mild sprains, patients are treated with rest, ice, compression and elevation also known as RICE. In both cases, they refrain from any activity until healed.

For some patients who have more severe foot and ankle problems, surgery or invasive care may be the only choice of treatment. Surgical treatment usually involves bunion deformities, torn ligaments and stress fractures. In the case of stress fractures, a screw, plate or a combination of surgical hardware is inserted into the foot to repair the injury.

The old adage, "the right tool for the right job," is true. Continued on Page 18

Patient Tracking

— Continued from Page 12
the patient, an entire medical history could be assembled and stored on the wristband," Everhart added.

What is the next step?

According to Stiney, "We are going to capitalize on the lessons learned from this experience. This is not a 100 percent completed system yet, so we are going to take the information gathered by all the users over there and fine-tune the system to create a better product.

"I think we will have a final product ready in a year. TacMedCS will be adaptable to requirements: preventive medicine, trauma treatment, casualty evacuation and humanitarian assistance. Whatever Navy medicine's requirements are, we will deliver." ■



U.S. Navy photo by Chief Journalist Al Bloom

Hospital Corpsman 2nd Class Sara Beishir and a crewmember of an Army UH-60 Black Hawk helicopter transfer one of the more than 500 patients seen by Fleet Hospital Three staff since the first Navy Expeditionary Medical Facility set up in a combat zone and started accepting patients on April 1. FH-3's surgical capabilities range from ear, nose and throat and neurosurgery to orthopedics and ophthalmology.

Right Shoe

— Continued from Page 17
performance and minimizing injury. While Rullan does not promote any particular brand of shoes, he does suggest the following guidelines for buying shoes.

The type of terrain and activity an individual chooses will determine the type of shoe. For the most part, a good running shoe should have a wide-heel base. The wider the heel base, the more stable the heel is when it comes into contact with the ground. Narrow heel-base shoes can cause ankle sprains.

Also, a good running shoe will incorporate a rocker bottom (curved bottom) into the forefoot, so there is less energy expenditure when running. As a result, the exercise becomes amenable to conservation of energy and reduces wear and tear on the joints, according to Rullan.

With respect to shoe size, it is best to buy shoes at the end of the day. In

this regard, one can fit the shoe to the foot size because the feet are maximally swollen, which avoids the purchase of an ill-fitting shoe.

Rullan says he discards the myth, "Give yourself time to break in the shoe."

In the case of diabetic people, for example, the process of "breaking in a shoe" will bring more serious problems, such as injuries from shoes digging into their feet. Infection then sets in the foot because of breaks in the skin, which will cause circulation problems. Rullan emphasizes that the ideal situation is to buy a shoe that fits right from the very beginning.

The following tips are guidance to reduce the risk of foot and ankle injury:

Make slow increments when running and gradually build up to longer distances if your body is not accustomed to running.

Stretch before and after activity to loosen muscles and tendons.

Know the terrain.

Listen to your body. Don't stick to the "no pain, no gain" phrase when not comfortable with activity. Once your body has reached its physiologic limit, stay at that limit.

Have proper shoe gear for running.

Supplement exercise routine with other activities such as swimming, weight training, cycling and other cardiovascular activities that will minimize joint injury.

No matter what the sport, it's always a challenge in fitting the right shoe to the foot. The style of shoe, where they are made and the type of shoe gear bought all influence the size. So, "let your fingers do the walking," but let your feet do the running in the right pair of shoes. ■

Bones

— Continued from Page 17
on a person's age, an acceptable calcium level would be between 1,000 and 1,300 milligrams per day. You can do this by eating calcium-rich foods, such as cheese and broccoli, and drinking low-fat milk. Also, explore food choices that already have calcium in them, such as some orange juice, cereals and breakfast bars.

After satisfying the calcium requirement, you can get your Vitamin D from major food sources, such as dairy products, egg yolks, saltwater fish and liver, according to National Osteoporosis Foundation. As you maintain the nutritional aspect, don't forget to exercise. Examples of weight-bearing exercises include walking, jogging or dancing.

According to the National Osteoporosis Foundation, building

strong bones, especially before the age of 30, can be the best defense against developing osteoporosis, and a healthy lifestyle can be very important for maintaining strong bones.

To learn more about osteoporosis and its effects on the body, go to the National Osteoporosis Foundation's Web site at <http://www.nof.org/> ■

Radiology

— Continued from Page 15
\$200,000 to \$400,000 as annual base pay.

To retain radiologists, the Air Force, Army and Navy are focusing on making radiologists' jobs and lives easier.

"They have to pull incredible schedules — after hours, on call — because someone's got to read the images, and quickly," De Treville said.

With teleradiology, it allows them to be virtually anywhere reading images — whether the images come from a nearby base or across the ocean from a tent — via secure, high-speed connections.

In addition to reducing the radiologist's stress, teleradiology improves service to patients. Facilities that do not have staff radiologists can obtain radiology interpretations on the same day the images are taken. The old system, in contrast, required x-ray techs to pack films in boxes and mail them away to be read, a process that routinely took up to 21 days in remote locations in Korea and Germany.

In March 2002, for example, CT images for a soldier in Bosnia diagnosed with a brain tumor were reviewed first by neurosurgeons at Landstuhl Region Medical

Command in Germany. Later that day neurosurgeons at Walter Reed Army Medical Center saw the images and consulted with Landstuhl on how best to treat the patient, whom they evacuated to Walter Reed.

Today's systems are fairly straightforward, Riha said. They contain an x-ray machine to expose a reusable film-like phosphor coated plate, a computed radiography scanner to extract the medical image in digital format from the plate, a specialized server to store and distribute the images and laptops or PCs to view and interpret images.

"You can deploy the system in a hardened plastic case and set it up in a tent or shelter," Riha said.

After the equipment is set up in a remote location, all that's left for the x-ray tech to do is determine the best way to get the encrypted image to a radiologist. Images can be burned on a CD and sent along with the patient, or if space-based wide area network bandwidth is available, the server can bounce images 23,000 miles up to a satellite, which in turn bounces them to Landstuhl to the radiologist's computer. Images that need to go from Germany to stateside facilities, like the Walter Reed Army Medical Center, are typically sent via terrestrial, (for example, submarine) cable.

"When there's a patient being medically evacuated, the patient's

information is sent through the system, so the doctors can get prepared before the patient arrives," said Liz Spangler, who works on network security for the Army's system.

Though the images can be large — a three-image series of chest x-rays can be 30 megabytes — images seemingly speed from sender to receiver. With today's wide-area network connections, images "can traverse an entire continent within a matter of seconds to a few minutes, so there really isn't a noticeable time lag in sending and receiving teleradiology exams," Lewis said.

Often used so remote locations can "reach back" to a fixed facility to get radiology or other medical support, teleradiology also allows those facilities to reach forward for help. When Williams was deployed in Bosnia and found he had spare time, he used the system to read images from Fort Bragg, in effect becoming the on-call radiologist.

"Because of the time difference in overseas locations, the deployed radiologist can get the image, read it and return it with a report during normal work hours in their time zones, when radiologists back home might be asleep," Riha said. ■



All Wound Up

Personnel from the 615th Air Mobility Operations Group lay concertina wire to secure the perimeter of a forward-deployed location in Iraq supporting Operation Iraqi Freedom.

U.S. Air Force photo by Senior Airman JoAnn S. Makinano

Air Force Association
1501 Lee Highway
Arlington, VA 22209-1198
Phone: (800) 727 - 3337
<http://www.afa.org>

American Legion
1608 K St., NW
Washington, DC 20006
Phone: (202) 861 - 2700
<http://www.legion.org>

American Red Cross
17th & D Streets, NW
Washington, DC 20006
Phone: (202) 639 - 3520
<http://www.redcross.org>

American Veterans
4647 Forbes Blvd.
Lanham, MD 20706
Phone: (877) 726 - 8387
<http://www.amvets.org>

Association of the U.S. Army
2425 Wilson Blvd.
Arlington, VA 22201
Phone: (800) 336 - 4570
<http://www.ausea.org>

Department of Veterans Affairs
810 Vermont Ave., NW
Washington, DC 20400
Phone: (202) 273 - 4300
<http://www.va.gov>

Disabled American Veterans
807 Maine Ave., SW
Washington, DC 20024
Phone: (202) 554 - 3501
<http://www.dav.org>

Enlisted Association of the National Guard
1219 Prince St.
Alexandria, VA 22314
Phone: (800) 234 - 3264
<http://www.eangus.org>

Fleet Reserve Association
125 N. West St.
Alexandria, VA 22314-2754
Phone: (703) 683 - 1400
<http://www.fra.org>

Marine Corps Association
715 Broadway St.
Quantico, VA 22134
Phone: (866) 622 - 1775
<http://www.mca-marines.org>

Marine Corps League
8626 Lee Highway, #201
Merrifield, VA 22031
Phone: (800) 625 - 1775
<http://www.mcleague.org>

National Association for Uniformed Services
5535 Hempstead Way
Springfield, VA 22151
Phone: (800) 842 - 3451
<http://www.naus.org>

National Committee for Employer Support of the Guard and Reserve
1555 Wilson Boulevard, Suite 200
Arlington, VA 22209-2405
Phone: (800) 336 - 4590
<http://www.esgr.org>

National Guard Association of the United States
1 Massachusetts Ave., NW
Washington, DC 20001
Phone: (202) 789 - 0031
<http://www.ngaus.org>

Naval Reserve Association
1619 King St.
Alexandria, VA 22314-2793
Phone: (703) 548 - 5800
<http://www.navy-reserve.org>
Navy League

2300 Wilson Blvd.
Arlington, VA 22201
Phone: (800) 356 - 5760
<http://www.navyleague.org>

Non Commissioned Officers Association
225 N. Washington St.
Alexandria, VA 22314
Phone: (703) 549 - 0311
<http://www.ncoausa.org>

Reserve Officers Association
1 Constitution Ave., NE
Washington, DC 20002
Phone: (800) 809 - 9448
<http://www.roa.org>

Military Officers Association of America
201 N. Washington St.
Alexandria, VA 22314
Phone: (800) 245 - 8762
<http://www.moaa.org>

Veterans of Foreign Wars
200 Maryland Ave., NE
Washington, DC 20002
Phone: (202) 543 - 2239
<http://www.vfw.org>

Vietnam Veterans of America
8605 Cameron Street, Suite 400
Silver Spring, MD 20910-3710
Phone: (301) 585 - 4000
<http://www.vva.org>

OTHER RESOURCES

By Phone

Direct Hotline for Servicemembers, Veterans and Families
(800) 497 - 6261

Deployment Health Clinical Center
(866) 559 - 1627

Department of Veterans Affairs
(800) 827 - 1000

VA Gulf War Registry
(800) 749 - 8387

VA Benefits and Services
(877) 222 - 8387

On the Web

Department of Defense
<http://www.defenselink.mil>

Department of Veterans Affairs
<http://www.va.gov/>

DeploymentLINK
<http://deploymentlink.osd.mil>

GulfLINK
<http://www.gulflink.osd.mil>

TRICARE
<http://www.tricare.osd.mil/>